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10/015,266	12/12/2001	Michael Wayne Brown	AUS290010825US1	1753

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AMY PATILLO
PO BOX 161327
Austin, TX 78716

EXAMINER

UBILES, MARIE C

ART UNIT PAPER NUMBER

2642

DATE MAILED: 03/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/015,266

Applicant(s)

BROWN ET AL.

Examiner

Marie C. Ubiles

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 9-10, 14-17, 22-23 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Shtivelman (US 6,157,655).

As for claim 1, Shtivelman discloses a method for estimating wait times within a hold queue (See Summary of the Invention, Col. 4, lines 35-36) comprising, estimating a plurality of call times individually for a plurality of calls within a call center (or ~~communication center 51~~) (See Summary of the Invention, Col. 4, lines 37-48); positioning a particular call received from a caller at said call center within a hold queue (as read on "designated call in the call-waiting queue") (See Summary of the Invention, Col. 4, lines 36-37); and estimating a wait time in said hold queue for said particular call according to said plurality of call times individually estimated for said plurality of calls within said call center (as read on *N*, total calls in queue and *Th*, average time handling each call) (See Description of the Preferred Embodiments, Col. 10, lines 60-67 and Col. 11, lines 1-20).

As for claim 2, Shtivelman discloses the method as claimed, wherein estimating a plurality of call times further comprises, estimating said plurality of calls according to

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an average time per representative (See Summary of the Invention, Col. 4, lines 62-67 and Col. 5, lines 1-2).

As for claims 3, Shtivelman discloses the method as claimed wherein said average time per representative is further specified according to a subject (or *agent skill*) (See Fig. 3 and Description of the Preferred Embodiments, Col. 10, lines 1-11).

As for claim 4, Shtivelman discloses the method as claimed for estimating wait times within a hold queue, wherein said average time per caller is further specified according to an average time of a total call within said call center (See summary of the Invention, Col. 4, lines 40-41).

As for claims 9-10 and 22-23, it is inherent from Shtivelman that a plurality of calls are waiting in said hold queue (as read on *N, total calls in queue*) and that said plurality of calls are assisted by a plurality of representatives (or *agents*) within said call center (or *ACD*) (See Abstract, lines 1-4 and Description of the Preferred Embodiments, Col 11, line 20)

Claims 14 and 25 are rejected for the same reasons as claim 1. It is inherent from Shtivelman that a recording medium is used for the hold queue process (as read on use of Stat-server) (See Description of the Preferred Embodiments, Col. 9, lines 27-32).

Claim 15 is rejected for the same reasons as claim 2.

Claim 16 is rejected for the same reasons as claim 3.

Claim 17 is rejected for the same reasons as claim 4.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eitel et al (US 5,933,828).

As for claim 31, Eitel et al. discloses a method for monitoring on hold characteristics, comprising, receiving monitored on hold characteristics according to a caller identifier (or *DNIS* or *ANI*) from at least one call center (or *ACD*) at said caller which has waited in a hold queue of a call center communicatively connected to a caller profile server (See Detailed Description, Col. 3, lines 48-54 and 61-65), computing on hold statistics for said caller across at least one call center from said monitored

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characteristics in said caller profiles (See Detailed Description, Col. 3, lines 61-65); and responsive to a request for said caller identifier, distributing said computed on hold characteristics for said caller, such that call center is enabled to estimate hold times within a hold queue compromising said caller (See Detailed Description, Col. 3, lines 66-67 and Col. 4, lines 1-5).

Eitel et al. teaches that this method can be applied among a plurality of call center (or ACDs) (See Detailed Description, Col. 3, lines 19-24). It would have been obvious to one of ordinary skill in the art to modify the invention to work with a plurality of call centers and thus allowed the call to be handled more efficiently in case of a heavy call work load.

Claims 32-33 are rejected for the same reasons as claim 31. Eitel et al. discloses the use of a recording (as read on *stored in the database 40*) (See Detailed Description, Col. 3, lines 64-65).

3. Claims 6, 11-13, 19, 24, 26-27 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shtivelman (US 6,157,655), as applied to claims 1-3, 9-10, 14-17, 22-23 and 25; and in view of Eitel et al. (US 5,933,828).

As for claim 12, Shtivelman discloses the method as claimed, except for the step of authenticating a plurality of caller identifiers at a call center and receiving a plurality of caller profiles associated with said plurality of caller identifiers, and wherein said plurality of caller profiles comprise time averages for said plurality of callers while previously on hold at at least one call center.

Eitel et al. teaches "Upon receipt of the call, a number of attributes of the received call (e.g., ANTI, DNIS, etc.) are transferred from the PSTN 20 to the ACD 22. The data fields may be forwarded to the server 36 for entry into the database 40 for purposes of call tracking and performance monitoring. A dialed number identification service (DNIS) number and/or a automatic number identification (ANI) (also sometimes, referred to as caller ID) may be received and be entered into the database 40 of the server 36 along with a uniquely generated call number. Other information about the call such as a trunk group number and trunk number may also be received and stored in the newly created call processing file. Further, where the incoming line is an 800 or 900 number where a caller cannot block a caller ID process, the data may also include indication that the caller has attempted to block the caller ID process. Information such as the ANTI number may be used by a processor of the ACD switch 22 to search the database 40 of the server 36 to identify the caller. Upon identifying the caller, other records of the database 40 may be searched to retrieve a customer file. An identifier of the customer file may also be placed in the call processing file. [...] While the call is in the queue, the processor of the ACD 22 periodically updates a timer measuring the total time that the call has been in the queue. The total time in the queue is also stored in the database 40 as part of the call processing history in the call file." (See Detailed Description, Col. 3, lines 33-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shtivelman's invention by adding the step of authenticating a call identifier, retrieving a call profile associated with said call identifier,

and wherein call profile comprise the time the user has previously spent on hold, as taught by Eitel et al. In this manner providing a method for estimating times at a call center in which the queue history is used when calculating the average wait time for a particular caller, therefore providing more efficient call tracking and performance monitoring. Further, it is obvious that a call center will receive a plurality of calls and these estimations will be calculated based said plurality of calls (as read on "incoming calls")(See Detailed Description, Col. 3, lines 22-23).

As for claim 13, Eitel et al. discloses, the method as claimed wherein a caller profile (or *call file*) is received from at least one profile server (or *database 40*), wherein said at least one profile server is accessible to a call server (See Detailed Description, Col. 3, lines 61-67 and Col. 4, lines 1-5). Eitel et al. suggests that these can be applied to a plurality of caller profiles (as read on "*other records of the database 40 may be searched*") (See Detailed Description, Col. 3, line 52) and profiles are available to a plurality of call centers (or *ACDs*) (See Detailed Description, Col. 3, lines 19-24).

Claims 6, 11, 19, 24, 26-27 and 30 are rejected for the same reasons as claims 12-13.

4. Claims 5 and 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Shtivelman (US 6,157,655), as applied to claims 1-3, 9-10, 14-17, 22-23 and 25; and in view of Katz (US 5,561,707).

Shtivelman discloses the method as claimed, except for activity participated in by a selection of said plurality of callers comprises a survey or a competition.

Katz teaches "In one operating process format, the public might be polled with regard to locating the specific purchasers of a defective or dangerous product. Alternatively, the public might be polled with objective of locating persons susceptible to a specific ailment or disease. Public auctions of unprecedented participation are possible. Legal lotteries are enabled that are interesting, effective and very economical on an individual participant basis. The system also might be employed in various games formats or to automate a promotion or mail-order operation, even to the extent of including inventory control as detailed below." (See Detailed Description, Col. 3, lines 35-45).

Katz teaches that it is possible to add activities such as survey (or *polls*) and competitions (or *games*) to a call center (or *ACD*), the information generated by the callers can be stored and used later as statistical data. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shtivelman claimed invention as per Katz teachings and thus obtain a method for estimating wait times in which statistics obtain from these activities can be used to isolate a select group or subset of callers who can be readily identified and readily confirmed.

5. Claims 7-8, 20-21 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shtivelman (US 6,157,655), as applied to claims 1-3, 9-10, 14-17, 22-23 and 25; and in view of Ginsberg (US 6,064,730).

Shtivelman discloses the method as claimed, except for publishing said wait time to an interface selected by said caller and publishing a plurality of criteria utilized to estimated said plurality of call times.

As for claims 7-8, Ginsberg teaches "[...] a caller to have his interests better served, the present invention enables a user to graphically view a representation of an organization so as to learn information, such as, the identity, status, availability, and waiting time, regarding a particular agent who is capable of addressing the user's concerns. The user can then connect to an appropriate agent. In accordance with the principles of the invention, a user first connects to a dynamic graphical display of the organization. This display may include, for example, a map of the organizational structure, and an indication of each agent and/or agent station, including whether the station is manned and the length of the particular agent's queue. The graphical display continuously receives updated information about the organization from one or more databases, which may include queue information from the organization's PBX. Upon selecting an agent to whom to be connected, a telephone link or other type of communication link is opened between the caller and the selected agent. When the user places himself on an agent's queue that information is provided to the PBX." (See Summary of the Invention, Col. 2, lines 8-26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shtivelman's claimed invention by adding an interface selected by said caller for publishing said wait time (as read on "*a user first connects to a dynamic graphical display*") and publishing a plurality of criteria utilized to estimated

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said plurality of call times (as read on *"to learn information, such as, the identity, status, availability, and waiting time, regarding a particular agent"*), as taught by Ginsberg; thus in this manner providing the user with wait times information regarding a preferred agent or representative and keep the customer satisfied.

Claims 20-21 and 28-29 are rejected for the same reasons as claims 7-8.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Flockhart et al. (US 5,684,872) teaches "In response to a call from a caller coming into the call center, the level of motivation of the caller for making the call is predicted prior to the call being answered". (See Summary of the Invention, Col. 2, lines 3-6).

Brown et al. (US 5,164,983) teaches "Each TC is typically linked to one or more data centers (DCs) in the complex. However, there may be some situations in which data centers are not included in a telemarketing complex. Each TC is equipped with an automatic call distributor (ACD) to receive calls and subsequently distribute those calls among groups of agents or attendants assigned to each location." (See Background of the Invention, Col. 2, lines 33-40).

Morganstein et al. (US 5,166,974) teaches a call processing apparatus for queuing calling parties waiting to be connected to a service position.

Hikawa (US 5,646,988) teaches a call registering apparatus within the incoming call controller store identification data of each particular calling subscriber or calling terminal receiving a busy signal.

Cuschleg, Jr. et al. (US 4,953,204) teaches methods and apparatus for queuing calls to a multilocation service provider having a plurality of automatic call distributors (ACDs).

Crockett (US 5,590,188) teaches a method, using a call processor, for selecting one of a plurality of call center in a telephone network.

Walker et al. teaches a priority call queuing system that allows the called site to exercise control over the position in a phone queue of an incoming call.

Friedes (US 5,444,774) teaches an interactive queuing system for call centers.

Polcyn (US 5,796,791) teaches a call management system that provides an interface between the user and a predictive dialer.

Lee (US 4,788,715) teaches that calls waiting in a queue to receive attendant service are informed of the expected waiting time prior to connection to an attendant.

Constantini et al. (US 5,506,898) teaches an improved estimated waiting time arrangement.

McDonald et al. (US 5,867,572) teaches estimating an approximate time for which a designated customer in a queue of customers may be required to wait for a serve.

Goldberg et al. (US 6,058,364) teaches a system that includes a database with a plurality of customer information stored within.

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Hartmeier (US 5,864,616) teaches a display tool and a call distribution system that provides queue and agent statistics.


Uppaluru (US 5,915,001) teaches the use of a caller's personal profile.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marie C. Ubiles whose telephone number is (703) 305-0684. The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (703) 305-4731. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Marie C. Ubiles
March 3rd, 2004.


AHMAD MATAR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

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